

REMARKS

This paper is in response to the Office Action of October 5, 2004. The due date for response extends to March 7, 2005, with a two month extension.

Claim 1 and 2 have been rejected under 35 USC § 102(e), as being anticipated by U.S. Pat. 6,590,634, to Nishi et al. (Nishi). In view of the clarifying amendments, the Applicants traverse the rejection.

Claim 1, as amended, defines an optical alignment system for use in a semiconductor processing system. The optical alignment system includes a wafer chuck having an alignment feature disposed in a top surface of the wafer chuck, and the alignment feature is located at about a center of the wafer chuck. Further included is a beam-forming system disposed above the wafer chuck, and the beam-forming system is capable of emitting an optical signal onto the alignment feature. A detector, as further included, is capable of detecting an amplitude of the optical signal emitted onto the alignment feature.

Among several differences, one notable distinction over the teachings of Nishi is that the alignment features FM1 and FM2, are "...placed on upper surfaces of the wafer stages WS1, WS2 to be at the substantially same height as that of the wafers W1, W2 respectively" Col. 45, lines 42-46. Additionally, the alignment features FM1 and FM2 must be placed *beside and adjacent* to the wafers. The alignment feature, of the embodiment of claim 1, is "disposed in" a top surface of the wafer chuck. Additionally, the alignment feature is "located at about the center of the wafer chuck." For at least these differences, the Applicants submit that Nish fails to anticipate claims 1 and 2.

Claims 3-5 were rejected under 35 USC § 103(a), as being unpatentable over Nishi in view of US Pat. No. 5,815,594 to Tanaka. This rejection is respectfully traversed. As claim 1 is believed patentable over Nishi, dependent claims 3-5 are believed patentable for at least the same reasons, as dependent claims 3-5 add further features to those outlined in claim 1.

Claims 1 and 6-8 were rejected under 35 USC § 103(a), as being unpatentable over US Pat. No. 4,861,162 to Ina (Ina '162) and in view of US Pat. No. 4952,060 to Ina et al. (Ina '060). This rejection is respectfully traversed. Ina '162, as noted in Fig. 5, does not teach having an alignment feature disposed in the top surface of the wafer chuck, and the alignment feature is not located at about the center of the wafer chuck. The teachings of Ina '060 do not cure the deficiencies of Ina '162, as neither reference teach or suggests the combined features

of now amended claim 1. The claims dependent, either directly or indirectly from claim 1, are submitted to be patentable over Ina '162 and Ina '060, for at least the same reasons claim 1 is submitted to be patentable.

For at least the foregoing reasons, the Applicants respectfully request that the rejections of claims 1-8 be withdrawn.

Claims 9-21 were indicated to be allowable.

A notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present amendment, the Examiner is kindly requested to contact the undersigned at (408) 749-6903. If any other fees are due in connection with filing this amendment, the Commissioner is also authorized to charge Deposit Account No. 50-0805 (Order No LAM2P427). A duplicate copy of the transmittal is enclosed for this purpose.

Respectfully submitted,
MARTINE PENILLA & GENCARELLA, LLP



Albert S. Penilla, Esq.
Reg. No. 39,487

710 Lakeway Drive, Suite 200
Sunnyvale, CA 94085
Telephone: (408) 749-6900
Facsimile: (408) 749-6901
Customer No: 25920